

What is claimed is:

1. An integrated vehicle control system comprising a plurality of electronic control apparatuses connected via at least one communication line
5 to communicate with each other for controlling specific functions of a vehicle,

wherein one of said plurality of electronic control apparatuses functions as an overall control apparatus for transmitting operation directives to other electronic control apparatuses, each functioning as an
10 individual control apparatus, to cause respective individual control apparatuses to operate according to said operation directives, thereby realizing a collective control of said specific functions, and

said overall control apparatus determines said operation directives supplied to said individual control apparatuses based on information
15 obtained via said communication line from said individual control apparatuses, and executes abnormality detection processing for detecting abnormality occurring in the integrated vehicle control system.

2. The integrated vehicle control system in accordance with claim 1,
20 wherein

said overall control apparatus obtains condition data from said individual control apparatuses, said condition data representing operating conditions of control objective devices controlled based on said operation directives by said individual control apparatuses, and

25 said overall control apparatus executes said abnormality detection processing by detecting abnormality based on said obtained condition data and identifying an abnormal portion.

3. The integrated vehicle control system in accordance with claim 1,
30 wherein

said overall control apparatus executes gateway processing by selecting information necessary for other network from information received via said communication line and transmitting the selected information via a host network to another overall control apparatus, thereby allowing mutual
5 exchange of information between individual control apparatuses of differently functionalized networks.

4. An integrated vehicle control system comprising a plurality of networks connecting a plurality of electronic control apparatuses via a
10 plurality of communication lines to communicate with each other, each network being provided for one or a plurality of functions of a vehicle,

wherein one electronic control apparatus connected to each of said plurality of communication lines of said plurality of networks is a vehicle overall control apparatus for transmitting operation directives to other
15 electronic control apparatuses, each functioning as an individual control apparatus of said each network, to cause respective individual control apparatuses to operate according to said operation directives, thereby realizing a collective control of said functions of said each network,

said vehicle overall control apparatus determines said operation
20 directives supplied to said individual control apparatuses based on information obtained via said communication lines from said individual control apparatuses, and executes abnormality detection processing for detecting abnormality occurring in the integrated vehicle control system, and

said vehicle overall control apparatus executes gateway processing
25 by selecting information necessary for other network from information received via said communication lines and transmitting the selected information via a communication line of a corresponding network, thereby allowing mutual exchange of information between individual control apparatuses of different networks.

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5. The integrated vehicle control system in accordance with claim 4,
wherein

said vehicle overall control apparatus obtains condition data from
said individual control apparatuses, said condition data representing
5 operating conditions of control objective devices controlled based on said
operation directives by said individual control apparatuses, and

said vehicle overall control apparatus executes said abnormality
detection processing by detecting abnormality based on said obtained
condition data and identifying an abnormal portion.

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